

Remarks

The Office Action mailed August 27, 2003 and the Examiner Interview of August 13, 2003 have been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Applicants and the undersigned wish to express their appreciation to the Examiner for the courtesies she extended during a telephone interview that occurred on August 13, 2003. During the interview, the Office Action dated March 17, 2003 and Applicants' Amendment mailed June 2, 2003 were discussed. More specifically, the Section 112 rejections included in the March 17th Office Action and newly added Claims 25-28 included in Applicants' June 2nd Amendment were discussed. The Examiner advised the undersigned to include in the specification the statistical analysis software (SAS) system shown in Figure 4, and to clarify that "a typical output of modeling 104 is an algorithm that will be used in scoring 106." The Examiner further advised the undersigned that adding a recitation to independent Claims 1 and 13 of determining at least one marketing model and at least one risk model for a customer, and adding a recitation that included the marketing models or risk models recited within newly added Claims 25-28 should place the present patent application in condition for allowance. Applicants have made the suggested amendments.

Additionally, Applicants have included the recitation "using the tools to compare the first modeling result to prior modeling results, and then select a modeling result to facilitate customer targeting", which is not described or suggested by the cited reference. Accordingly, Applicants respectfully submit that the present patent application is in condition for allowance. The foregoing amendment has been made in consequence of the Examiner Interview.

Claims 1-28 are pending in this application. Claims 1-28 stand rejected.

The rejection of Claims 1-28 under 35 U.S.C. § 112, first paragraph, is respectfully traversed.

Applicants respectfully submit that the specification meets the requirements of Section 112, first paragraph. Specifically, Applicants respectfully submit that the specification, including the Figures, would enable one skilled in the art to make and/or use the invention as described in the present patent application. Applicants have amended the specification at page 6, lines 11 through 15 as discussed during the above-referenced telephone interview with the Examiner. No new matter has been added. Applicants submit that support for this amendment may be found, for example, in Figure 4 and in originally submitted Claim 13. The Examiner, during the above-referenced telephone interview, indicated that the amended specification would overcome the Section 112, first paragraph, rejection.

More specifically, with respect to Claims 1 and 13, the Office Action suggests that the “invention is not described in such a way as to enable one skilled in the art to which it pertains...to make and/or use the invention” because “Applicants fail to disclose when and how tools are integrated for modeling data within the relational database”. Claims 1 and 13 have been amended. Applicants have also amended the specification at page 6, lines 11 through 15 as discussed during the above-referenced telephone interview with the Examiner. No new matter has been added. Additionally, the specification describes at page 7, lines 16-17 that “models used are grouped under two general categories, namely marketing and risk”. Applicants respectfully submit that the specification, including the Figures, would enable one skilled in the art to make and/or use the invention as described in Claims 1 and 13. Accordingly, Applicants respectfully request that the rejection of Claims 1 and 13 under Section 112, first paragraph, be withdrawn.

With respect to Claims 6 and 18, the Office Action provides that “Applicants have not disclosed what type of algorithm may be used for the claimed invention”. Applicants have amended the specification at page 6, lines 11 through 15 as discussed during the above-referenced telephone interview with the Examiner. No new matter has been added. The specification provides that a “typical output of modeling 104 is an algorithm that will be used in scoring”. Applicants respectfully submit that it is unnecessary for the specification to describe the specific “type of algorithm” for one of ordinary skill in the art to make and/or use the

invention as described in the present patent application. Accordingly, Applicants respectfully request that the rejection of Claims 6 and 18 under Section 112, first paragraph, be withdrawn.

Claims 2-12 and 25-26 depend, directly or indirectly, from independent Claim 1. Applicants submit that independent Claim 1 satisfies Section 112, first paragraph, and is submitted to be in condition for allowance. When the recitations of Claims 2-12 and 25-26 are considered in combination with the recitations of Claims 1, Applicants submit that dependent Claims 2-12 and 25-26 likewise are patentable.

Claims 14-24 and 27-28 depend, directly or indirectly, from independent Claim 13. Applicants submit that independent Claim 13 satisfies Section 112, first paragraph, and is submitted to be in condition for allowance. When the recitations of Claims 14-24 and 27-28 are considered in combination with the recitations of Claims 13, Applicants submit that dependent Claims 14-24 and 27-28 likewise are patentable.

For the reasons set forth above, Applicants respectfully request that the rejection of Claims 1-28 under Section 112, first paragraph, be withdrawn.

The rejection of Claims 3-6, 15-17, and 19-20 under 35 U.S.C. § 112, second paragraph, is respectfully traversed.

Applicants respectfully submit that Claims 3-6, 15-17, and 19-20 satisfy the requirements of Section 112, second paragraph. More specifically, Applicants respectfully submit that Claims 3-6, 15-17, and 19-20 are definite and particularly point out and distinctly claim the subject matter of the invention. Applicants have amended the specification at page 6, lines 11 through 15 as discussed during the above-referenced telephone interview with the Examiner. No new matter has been added. Applicants submit that support for this amendment may be found, for example, in Figure 4 and in originally submitted Claim 13. The Examiner, during the above-referenced telephone interview, indicated that the amended specification would overcome the Section 112, second paragraph, rejection.

More specifically, with respect to Claims 3-4 and 15-16 and the “benefits and timing of using either statistical or non-statistical tools to model the relational database”, the specification and the Figures provide, for example, at page 6, lines 11-15 that the server is configured to apply the statistical software tools and the non-statistical tools against the relational database based on the customer data stored within the database. The specification also provides at page 3, lines 19-28 that once “the user inputs data relating to customer activity , the system then applies models to the newly entered data combined with the previously stored data and stored as a relational data base...once the data has been modeled, using modeling tools, score are applied....” Accordingly, Applicants respectfully submit that Claims 3-4 and 15-16 are definite and particularly point out and distinctly claim the subject matter of the invention.

Moreover, Applicants have amended Claim 6 to recite “wherein said step of using tools to model the relational database further comprises the step of using the tools to generate an algorithm for use in scoring customer accounts stored within the relational database.” Accordingly, Applicants respectfully submit that Claim 6 is definite and particularly points out and distinctly claims the subject matter of the invention.

Furthermore, Claims 7 and 19 have been amended. Applicants respectfully submit that Claims 7 and 19 are definite and particularly point out and distinctly claim the subject matter of the invention.

Claims 5 and 17 depend, directly or indirectly, from independent Claims 1 and 13, respectively. Applicants submit that independent Claims 1 and 13 satisfy Section 112, second paragraph, and is submitted to be in condition for allowance. When the recitations of Claims 5 and 17 are considered in combination with the recitations of Claims 1 and 13, Applicants submit that dependent Claims 5 and 17 likewise are patentable.

For the reasons set forth above, Applicants respectfully request that the rejection of Claims 3-6, 15-17, and 19-20 under Section 112, second paragraph, be withdrawn.

The rejection of Claims 1-24 under 35 U.S.C. § 102(e) as being anticipated by Honarvar et al. (U.S. Patent No. 6,546,545) (Honarvar) is respectfully traversed.

Applicants respectfully submit that Honarvar does not describe nor suggest the claimed invention. As discussed below, at least one of the differences between Honarvar and the present invention is that Honarvar neither describes nor suggests a method that includes using tools to model a relational database and produce a first modeling result including at least one marketing model and at least one risk model for a customer, wherein the at least one marketing model includes a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model. In fact, the Office Action acknowledges at page 9 that Honarvar does not teach that “the market and risk models includes a plurality of sub-models as claimed in the instant application.”

Moreover, Honarvar neither describes nor suggests a method that includes using tools that include non-statistical tools including artificial intelligence, wherein the tools are used to compare the first modeling result to prior modeling results, and then select a modeling result that facilitates customer targeting.

Honarvar describes a computer implemented decision management system which provides strategy versioning. The system (a) creates different strategy versions, (b) selects, without technical intervention, a respective strategy version of the created strategy versions, (c) applies, without technical intervention, the selected strategy version to determine interaction strategies, (d) monitors performance based on the determined interaction strategies, and (e) refines the selected strategy version in accordance with the monitored performance. To select and apply strategy versions without technical intervention, a graphical user interface (GUI) is used to enter, edit and select strategy versions at a desktop. From the GUI, the strategy versions are stored in relational tables within a relational data model. A versioning level is interjected between a system level and a segment level in a definition hierarchy, so that each strategy can be referenced as being a specific strategy version. Versioning can also be leveraged at other levels in the strategy hierarchy and in conjunction with inheritance.

Claim 1 recites a method that includes “compiling data from multiple sources to create a relational database...using tools to model the relational database and produce a first modeling

result including at least one marketing model and at least one risk model for a customer, wherein the at least one marketing model includes a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model, the tools include non-statistical tools including artificial intelligence...using the tools to compare the first modeling result to prior modeling results, and then select a modeling result to facilitate customer targeting...scoring the modeled database using the selected modeling result...integrating scores into a multi-dimensional structure...and providing access to end users to the multi-dimensional structure.”

Honarvar neither describes nor suggests a method as recited in Claim 1. More specifically, Honarvar neither describes nor suggests a method that includes using tools to model the relational database and produce a first modeling result including at least one marketing model and at least one risk model for a customer, wherein the at least one marketing model includes a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model.

Moreover, Honarvar neither describes nor suggests a method that includes using tools that include non-statistical tools including artificial intelligence, wherein the tools are used to compare the first modeling result to prior modeling results, and then select a modeling result that facilitates customer targeting.

Rather, Honarvar describes a computer implemented decision management system which provides strategy versioning. As noted in the Office Action at page 9, Honarvar does not teach that “the market and risk models includes a plurality of sub-models as claimed in the instant application.” Furthermore, Honarvar does not describe or teach using artificial intelligence to model the database; nor does Honarvar describe or teach using tools to compare the first modeling result to prior modeling results, and then select a modeling result that facilitates customer targeting. Rather, by describing a system that includes a graphical user interface (GUI) that enables a user to enter, edit, and select strategy versions at a desktop (see Abstract, and col. 21, lines 12-19), Honarvar actually teaches away from a system that compares first modeling results to prior modeling results and then selects a modeling result to facilitate customer

targeting. In other words, in Honarvar, the user selects the strategy version; whereas in the present invention, the system selects the modeling result. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Honarvar.

For at least the reasons set forth above, Claim 1 is submitted to be patentable over Honarvar.

Claims 2-12 depend, directly or indirectly, from independent Claim 1. When the recitations of Claims 2-12 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 2-12 likewise are patentable over Honarvar.

Claim 13 recites a system that includes "a server configured to compile data from multiple sources to create a relational database, use tools including artificial intelligence to model data within the relational database and produce a first modeling result including at least one marketing model and at least one risk model, use tools to compare the first modeling result to prior modeling results and then select a modeling result to facilitate customer targeting, score the modeled data using the selected modeling results, integrate the scores into a multi-dimensional structure and provide access to the multi-dimensional structure, wherein the at least one risk model includes a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model...."

Honarvar neither describes nor suggests a system as recited in Claim 13. More specifically, Honarvar neither describes nor suggests a server configured to use tools including artificial intelligence to model data within the relational database and produce a first modeling result including at least one marketing model and at least one risk model, wherein the at least one risk model includes a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model.

Moreover, Honarvar neither describes nor suggests a server configured use the tools to compare the first modeling result to prior modeling results and then select a modeling result that facilitates customer targeting.

Rather, Honarvar describes a computer implemented decision management system which provides strategy versioning. As noted in the Office Action at page 9, Honarvar does not teach that “the market and risk models includes a plurality of sub-models as claimed in the instant application.” Furthermore, Honarvar does not describe or teach using artificial intelligence to model the database; nor does Honarvar describe or teach a server configured to use tools to compare the first modeling result to prior modeling results, and then select a modeling result that facilitates customer targeting. Rather, Honarvar actually teaches away from a system that compares modeling results and selects a modeling result to facilitate customer targeting because Honarvar describes a system that includes a graphical user interface (GUI) that enables a user to enter, edit, and select strategy versions at a desktop (see Abstract, and col. 21, lines 12-19). Accordingly, Applicants respectfully submit that Claim 13 is patentable over Honarvar.

For at least the reasons set forth above, Claim 13 is submitted to be patentable over Honarvar.

Claims 14-24 depend, directly or indirectly, from independent Claim 13. When the recitations of Claims 14-24 are considered in combination with the recitations of Claim 13, Applicants submit that dependent Claims 14-24 likewise are patentable over Honarvar.

For at least the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-24 be withdrawn.

The rejection of Claims 25-28 under 35 U.S.C. § 103(a) as being unpatentable over Honarvar et al. (U.S. Patent No. 6,546,545) is respectfully traversed.

Honarvar is described above.

Claims 25 and 26 depend from independent Claim 1. Claim 1 recites a method that includes “compiling data from multiple sources to create a relational database...using tools to model the relational database and produce a first modeling result including at least one marketing model and at least one risk model for a customer, wherein the at least one marketing model includes a net present value/profitability model, a prospect pool model, a net conversion model,

an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model, the tools include non-statistical tools including artificial intelligence...using the tools to compare the first modeling result to prior modeling results, and then select a modeling result to facilitate customer targeting...scoring the modeled database using the selected modeling result...integrating scores into a multi-dimensional structure...and providing access to end users to the multi-dimensional structure.”

Honarvar neither describes nor suggests a method as recited in Claim 1. More specifically, Honarvar neither describes nor suggests a method that includes using tools to model the relational database and produce a first modeling result including at least one marketing model and at least one risk model for a customer, wherein the at least one marketing model includes a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model.

Moreover, Honarvar neither describes nor suggests a method that includes using tools that include non-statistical tools including artificial intelligence, wherein the tools are used to compare the first modeling result to prior modeling results, and then select a modeling result that facilitates customer targeting.

Applicants respectfully traverse the suggestion included in the Office Action at page 9 that because Honarvar teaches that “any data structure which is equivalent to a matrix in providing the required functionality for defining strategy and analyzing the movement of clients will be appropriate. Therefore, generally, many different types of data structures providing an intersection between categories and test groups can be used” (col. 10, lines 15-20), it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the claimed models in Honarvar’s marketing and risk data models.

Applicants respectfully submit that the description in Honarvar that “any data structure which is equivalent to a matrix in providing the required functionality for defining strategy and analyzing the movement of clients will be appropriate” does not in any way describe or teach using tools to model a relational database and produce a first modeling result including at least

one marketing model and at least one risk model for a customer, wherein the at least one marketing model includes a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model.

Moreover, although Honarvar does mention “various function sets, including credit card propensity to buy score (92), risk score (93) and offer selection (94)”, Honarvar does not describe or teach a marketing model that includes a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model, or a risk model that includes a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model. Furthermore, Honarvar does not describe or suggest modeling a relational database to produce a first modeling result including at least one marketing model and at least one risk model for a customer. Accordingly, Applicants respectfully submit that Claim 1 is patentable over Honarvar.

When the recitations of Claims 25 and 26 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 25 and 26 likewise are patentable over Honarvar.

In addition, dependent Claim 25 recites a method “wherein said step using tools to model the relational database further comprises the step of using tools to model the relational database to produce a plurality of marketing models and a plurality of risk models for a customer, wherein the marketing models include a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model, and wherein the risk models include a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model.” Honarvar neither describes nor suggests a method as recited in Claim 25. Accordingly, Applicants further submit that Claim 25 is patentable over Honarvar.

Claims 27 and 28 depend from independent Claim 13. Claim 13 recites a system that includes “a server configured to compile data from multiple sources to create a relational database, use tools including artificial intelligence to model data within the relational database and produce a first modeling result including at least one marketing model and at least one risk model, use tools to compare the first modeling result to prior modeling results and then select a modeling result to facilitate customer targeting, score the modeled data using the selected modeling results, integrate the scores into a multi-dimensional structure and provide access to the multi-dimensional structure, wherein the at least one risk model includes a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model....”

Honarvar neither describes nor suggests a system as recited in Claim 13. More specifically, Honarvar neither describes nor suggests a server configured to use tools including artificial intelligence to model data within the relational database and produce a first modeling result including at least one marketing model and at least one risk model, wherein the at least one risk model includes a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model.

Moreover, Honarvar neither describes nor suggests a server configured use the tools to compare the first modeling result to prior modeling results and then select a modeling result that facilitates customer targeting.

Applicants respectfully submit that the description in Honarvar that “any data structure which is equivalent to a matrix in providing the required functionality for defining strategy and analyzing the movement of clients will be appropriate” does not in any way describe or teach using tools including artificial intelligence to model a relational database and produce a first modeling result including at least one marketing model and at least one risk model for a customer, wherein the at least one risk model includes a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model, or wherein the at least one marketing model includes a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a

response model, a revolver model, a balance transfer model, and a reactivation model. Accordingly, Applicants respectfully submit that Claim 13 is patentable over Honarvar.

When the recitations of Claims 27 and 28 are considered in combination with the recitations of Claim 1, Applicants submit that dependent Claims 27 and 28 likewise are patentable over Honarvar.

In addition, dependent Claim 28 recites a system “wherein said server is further configured to use tools to model data within the relational database to produce a plurality of marketing models and a plurality of risk models for a customer, wherein the marketing models include a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model, and wherein the risk models include a payment behavior prediction model, a delinquency model, a bad debt model, a fraud detection model, a bankruptcy model, and a hit and run model.” Honarvar neither describes nor suggests a system as recited in Claim 28. Accordingly, Applicants further submit that Claim 28 is patentable over Honarvar.

For at least the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 25-28 be withdrawn.

Notwithstanding the arguments above, Applicants respectfully submit that the Section 103 rejection of Claims 25-28 is not a proper rejection. As is well established, the mere assertion that it would have been obvious to one of ordinary skill in the art to have modified Honarvar to obtain the claimed recitations of the present invention does not support a prima facie obvious rejection. Rather, each allegation of what would have been an obvious matter of design choice must always be supported by citation to some reference work recognized as standard in the pertinent art and the Applicants given the opportunity to challenge the correctness of the assertion or the notoriety or repute of the cited reference. Applicants have not been provided with the citation to any reference supporting the combination made in the rejection. The rejection, therefore, fails to provide the Applicants with a fair opportunity to respond to the

rejection, and fails to provide the Applicants with the opportunity to challenge the correctness of the rejection.

Further, and to the extent understood, Honarvar does not describe nor suggest the claimed combination. Specifically, Claim 1 recites a method that includes "using tools to model the relational database and produce a first modeling result including at least one marketing model and at least one risk model for a customer, wherein the at least one marketing model includes a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model, the tools include non-statistical tools including artificial intelligence...using the tools to compare the first modeling result to prior modeling results, and then select a modeling result to facilitate customer targeting...scoring the modeled database using the selected modeling result..."

Honarvar neither describes nor suggests a method that includes using tools to model the relational database and produce a first modeling result including at least one marketing model and at least one risk model for a customer, wherein the at least one marketing model includes a net present value/profitability model, a prospect pool model, a net conversion model, an attrition model, a response model, a revolver model, a balance transfer model, and a reactivation model. Moreover, Honarvar neither describes nor suggests a method that includes using tools that include non-statistical tools including artificial intelligence, wherein the tools are used to compare the first modeling result to prior modeling results, and then select a modeling result that facilitates customer targeting.

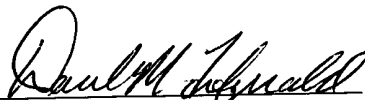
Applicants respectfully submit that the Section 103 rejection of Claims 25-28 is not a proper rejection. As is well established, obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching, suggestions or incentive supporting the combination. In addition, it is impermissible to use the claimed invention as an instruction manual or "template" to piece together the teachings of the prior art so that the claimed invention is rendered obvious. Specifically, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention. Further, it is impermissible to pick and choose from any one reference only

so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.

For the reasons set forth above, Applicants respectfully request that the rejection of Claims 25-28 under 35 U.S.C. §103(a) be withdrawn.

In view of the foregoing amendments and remarks, all the claims now active in the application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,



Daniel M. Fitzgerald
Registration No. 38,880
ARMSTRONG TEASDALE LLP
One Metropolitan Square, Suite 2600
St. Louis, Missouri 63102-2740
(314) 621-5070